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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,557

10/16/2003

Kiyohiro Akiyama

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08/04/2006

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EXAMINER

NEGRON, ISMAEL

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,557

Applicant(s)

AKIYAMA, KIYOHIRO

Examiner

Ismael Negron

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-7 and 18 is/are allowed.
- 6) ☒ Claim(s) 9,14-16 and 19 is/are rejected.
- 7) ☒ Claim(s) 10-12 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on June 16, 2006 has been entered. Claims 1, 4, 7, 9, 18 and 19 have been amended. Claims 2 and 8 have been cancelled. No claim has been added. Claims 1, 3-7 and 9-19 are still pending in this application, with claims 1, 9, 18 and 19 being independent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 9, 13-16 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by ITO et al. (U.S. Pat. 6,234,646).

3. ITO et al. discloses a vehicle lighting unit having:

- **a light emitting diode (as recited in claims 9 and 19), Figure 4,**
reference number 2a;
- **the light emitting diode (LED) emitting light (as recited in**
claims 9 and 19), inherent;

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- **a lamp lens (as recited in claims 9 and 19), Figure 4, reference number 5;**
- **the lamp lens having a light emission area (as recited in claims 9 and 19), inherent;**
- **a plurality of reflection surfaces (as recited in claims 9 and 19), Figure 4, reference number 3a;**
- **the reflection surfaces reflecting the light emitted by the LED (as recited in claims 9 and 19), as seen in Figure 4;**
- **a plurality of mirror finished surfaces (as recited in claims 9 and 19), Figure 4, reference number 3b;**
- **the mirror finished surfaces being arranged to not reflect light from the LED, but reflect outside light incident from the lamp lens (as recited in claims 9 and 19), as evident by Figure 4;**
- **an inner housing (as recited in claims 9 and 19), Figure 4, reference number 3;**
- **the inner housing having an inner surface facing the light emission area (as recited in claims 9 and 19), Figure 4, reference numbers 3a and 3b;**
- **the reflection surfaces and the mirror finished surfaces being alternately provided over the inner surface of the inner housing (as recited in claims 9 and 19), as seen in Figure 4;**

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- **the reflection surfaces being arranged mostly in within a range of an illumination angle of the LED (as recited in claims 9 and 19), as seen in Figure 4;**
- **each of the reflection surfaces being a part of a rotational paraboloid (as recited in claims 9 and 19), inherent, as evidenced by the parallel ray output seen in Figure 4;**
- **the paraboloid of the reflection areas having a focus on a light emission source of the first LED such that the paraboloids corresponding to the reflection surfaces that are farther from the LED have longer focal lengths (as recited in claims 9 and 19), inherent, as evidenced by the parallel ray output seen in Figure 4;**
- **each of the mirror finished surfaces being arranged on a segment that connects the light emission source of the LED to one of boundaries between the reflection surfaces and the mirror finished surfaces, or arranged on an opposite side to a light reflection direction of the reflection surfaces from the segment (as recited in claims 9 and 19), as evidenced by Figure 4;**
- **a plurality of LED (as recited in Claim 13), as seen in Figure 3;**

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- **each of the LED and the reflection surfaces are integrated into an arrangement (as recited in Claim 13), as evidenced by Figure 3;**
- **a plurality of the arrangements, wherein each of the arrangement is positioned at a different location in a light reflection direction of the reflection surfaces (as recited in Claim 13), as seen in Figure 3;**
- **a 0 degree axis of the LED being inclined toward a first reflection surfaces-side relative to an optical axis of the first reflection surfaces (as recited in Claim 14), as seen in Figure 4;**
- **the surfaces having different optical axis directions (as recited in Claim 15), as seen in Figure 4; and**
- **each of the reflection surfaces being divided into a plurality of reflection surfaces (as recited in Claim 16), as seen in Figure 4.**

Allowable Subject Matter

4. Claims 1, 3-7 and 18 are allowed

5. Claims 10-12 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Applicant teaches a vehicle lamp including first and second light emitting diodes arranged at different locations, a lamp lens, and a reflector having a plurality of alternate paraboloid first and second reflection sections, each section reflecting light from a respective one of the LED toward a same output direction. A linear Fresnel lens is located between each LED and the corresponding reflection surface, the Fresnel lens mostly transmitting the light from the LED in a cross section including the reflective surfaces, while refracting the light from such LED as almost parallel light in a cross section orthogonal to the light reflection direction of the respective surfaces. In a second embodiment, the lamp lens includes outer and inner lenses; with the inner lens, including a plurality of alternatively provided concave and convex portions corresponding to the ranges in which reflected light from the reflection surfaces are incident. A third embodiment features only the first LED, and the second reflective surfaces are arranged to not reflect light from the LED, but to reflect outside light incident from the lamps lens. The third embodiment also including the claimed linear Fresnel lens. A fourth embodiment also includes the claimed outer and inner lenses.

7. No prior art was found teaching individually, or suggesting in combination, all of the features of the applicants' invention, specifically the claimed linear Fresnel lens structure or the claimed inner lens, in combination with the other recited structural limitations of the claimed Vehicle lamps.

8.

Response to Arguments

9. Applicant's arguments filed June 16, 2006 have been fully considered but they are not persuasive.

10. Regarding the Examiner's rejection of Claims 9 and 19 under 35 U.S.C. 102(b) as being anticipated by ITO et al. (U.S. Pat. 6,234,646), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically the mirror finished surface being arranged so as not to reflect the light emitted by the LED but to reflect an outside light incident from the lamp lens.

11. Regarding the Examiner's rejection of Claims 13-16 under 35 U.S.C. 102(b) as being anticipated by ITO et al. (U.S. Pat. 6,234,646), the applicant present no arguments, except stating that such claims depend directly from independent Claim 9 and would be allowable when/if the independent claim is allowed.

12. In response to applicant's arguments that ITO et al. fail to disclose the mirror finished surfaces reflecting light incident from the lamp lens, but not light from the LED, the applicant is advised that in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 159 USPQ 342 (CCPA 1968).

In this case, as detailed in previous section 3, ITO et al. discloses a vehicle lighting unit 1 including an inner housing 3, such inner housing 3 formed by a plurality of

alternating paraboloid reflective portions 3a and 3b. Reflective portions 3a are arranged in such a manner as to reflect light from the LED in a direction parallel to an axis P. Reflective portions 3b are arranged so as to not reflect light from the LED. Both the reflective portions 3a and 3b are capable of reflecting outside light incident on the inner housing 3 from the lamp lens 5, as evidenced by Figure 4.

While the applicant might be correct in stating that ITO et al. fails to explicitly disclose the patented reflective portions 3b of the inner housing 3 as being capable of reflecting outside light incident on the inner housing 3 from the lamp lens 5, such capability is clearly evident in Figure 4.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (571) 273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.



THOMAS M. SEMBER
PRIMARY EXAMINER



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